

WHAT IS CLAIMED IS:

1. A development system for toner comprising:
 - a supply of dry developer mixture comprising chemically prepared toner particles and hard magnetic carrier particles;
 - 5 a non-magnetic, cylindrical shell for transporting the developer from said supply to a development zone, wherein said shell is rotatable or stationary;
 - a rotating magnetic core of a pre-selected magnetic field strength; and
 - means for rotating at least said magnetic core to provide for the transport of said toner particles from said shell to an electrostatic image.
- 10 2. The development system of claim 1, wherein said chemically prepared toner particles comprise at least one toner resin, at least one release agent, at least one surface treatment agent, and optionally at least one charge control agent or colorant or both.
3. The development system of claim 2, wherein said surface treatment agent comprises silica.
- 15 4. The development system of claim 2, wherein said surface treatment agent comprises at least one metal oxide.
5. The development system of claim 2, wherein said surface treatment agent comprises at least one inorganic oxide.
6. The development system of claim 2, wherein said surface treatment agent
- 20 comprises at least one polymeric material.
7. A method for developing an electrostatic image with chemically prepared toner particles comprising developing an electrostatic image member bearing an electrostatic image pattern by moving the image member through a development zone and transporting developer through the development zone in developing relation with the charge pattern of the moving
- 25 imaging member by rotating an alternating-pole magnetic core of a pre-selected magnetic field strength within an outer non-magnetic shell, which is rotating or stationary, and controlling the directions and speeds of the core and optionally the shell rotations so that developer flows through the development zone in a direction co-current with the image member movement, wherein said developer comprises charged toner particles and oppositely charged hard magnetic
- 30 carrier particles.

8. The method of claim 7, wherein said toner particles comprise at least one toner resin, at least one release agent, at least one surface treatment agent, and optionally at least one charge control agent or colorant or both.

9. The method of claim 7, wherein said method has a developer flow, and said moving imaging member and said developer flow are moving at substantially the same speed.

10. The method of claim 7, wherein said carrier particles comprise hard magnetic material exhibiting a coercivity of at least about 300 gauss when magnetically saturated and also exhibit an induced magnetic moment of at least about 20 EMU/gm when in an externally applied field of 1,000 gauss.

11. The method of claim 7, wherein said toner particles comprise a spacing agent on the surface of said toner particles.

12. The method of claim 11, wherein said spacing agent comprises silica.

13. The method of claim 11, wherein said spacing agent comprises at least one metal oxide.

14. The method of claim 11, wherein said spacing agent comprises at least one inorganic oxide.

15. The method of claim 11, wherein said spacing agent comprises at least one polymeric material.

16. The method of claim 11, wherein said spacing agent is present in an amount of from about 0.05 to about 1.5 wt%, based on the weight of the toner.

17. The development system of claim 1, wherein said chemically prepared toner particles are formed from an evaporation limited coalescence reaction.

18. The development system of claim 1, wherein said chemically prepared toner particles are formed by suspension polymerization.

19. The development system of claim 1, wherein said chemically prepared toner particles have a partial size of about 6 microns or less.

20. The development system of claim 2, wherein said at least release agent comprises at least one wax and said at least one toner resin comprises at least one polyester or at least one styrene acrylic based toner resin.

21. The development system of claim 2, wherein said at least one resin is present in an amount of from about 80% to about 95%, said release agent is present in an amount of from

about 0.5% to about 5.0%, and said surface treatment agent is present on the toner particles in an amount of from about 0.05% to about 2.0%, all based on the weight of the toner particles.

22. The development system of claim 1, further comprising a fuser.

23. The method of claim 7, further comprising transferring said electrostatic image
5 pattern onto a substrate and fusing said electrostatic image on said substrate by passing the substrate through or under a fuser.